

TAUBENFLIEGEL, W.; WAJDA, Z.; LEWINSKI, A.

Determination of the condition of vascularization of pedicle skin grafts (Gillies-Filatov) by the thermoelement. Acta chir. plast. (Praha) 7 no.3:236-240 '65.

1. The 3rd Surgical Clinic, Medical Academy, Gdansk (Poland)
(Director: Prof. Zdzislaw Kieturakis M.D.).

KOZLOWSKI, W.; RACZYNSKI, S.; TAUBENFLIGEL, W.; KOSSAK, J.; LEWINSKI, A.;
BANASIK, Z.

Experimental studies on the insertion of an electronic pacemaker
of the heart of our construction in the dog. Preliminary commu-
nication. Kardiol. Pol. 8 no.2:125-128 '65.

1. Z III Kliniki Chorob Wewnetrznych (Kierownik: prof. dr.
M. Garski) i z III Kliniki Chirurgicznej AM w Gdansk (Kierownik:
prof. dr. Z. Kieturakis).

S/269/63/000/004/014/C30
A001/A101

AUTHORS: Nestorov, G., Taubenheim, J.

TITLE: A criterion of determining ionization-recombination constants of the E ionospheric layer from observations made during a total solar eclipse

PERIODICAL: Referativnyi zhurnal, Astronomiya, no. 4, 1963, 59, abstract
4.51.453 ("Dokl. Bolg. AN", 1962, v. 15, no. 1, 25 - 28, German;
Russian summary)

TEXT: The authors propose a method of interpreting ionospheric and radio astronomical observations during total solar eclipses. If there are n discrete radiation sources on the Sun, the total radiation will be as follows:

$$Q = pS_h + \sum_{i=1}^n \delta_i S_i,$$

where S_h is homogeneous radiation of the undisturbed solar disk; p is the magnitude (in per cent) of the disk uncovered part; $q = q/q_0$, where q and q_0 are

Card 1/2

S/269/63/000/004/014/030

A criterion of determining ionization-recombination... A001/A101

ionizing radiation in the eclipse day and in control days. In case of two discrete sources, two instants can be chosen: one between the first and second contacts, and the other - between the third and fourth contacts, for which equations are derived. The solution of these equations, together with the ionization-recombination equation $dN/dt = q - dN^2$ and with the equation $S_h = dQ/dp$, increases the reliability of determining ionization-recombination constants and makes it possible to separate ionizing radiation of the homogeneous disk from ionization of discrete sources.

N. B.

[Abstracter's note: Complete translation]

Card 2/2

43444

S/169/62/000/011/075/077
D228/D307

9.9130

AUTHORS: Nestorov, G. and Taubenheim, J.
TITLE: Recombination factor and ionizing radiation sources
for the E-layer during the total eclipse of February
15, 1961
PERIODICAL: Referativnyy zhurnal, Geofizika, no. 11, 1962, 33-34,
abstract 11G214 (Dokl. Bolg. AN, 15, no. 2, 1962,
131-134 (Ger.; summary in Rus.))

TEXT: The effective recombination factor of the E-layer
($\alpha_E = 1.10 \cdot 10^{-7} \text{ cm}^3 \text{ sec}^{-1}$), the relative ionizing radiation intensity
of the sun's uniform disk ($S_\lambda = 0.57$), and the discrete sources of
the sun's western ($S_1 = 0.26$) and eastern ($S_2 = 0.17$) edges were
determined on the basis of analyzing the results of ionospheric and
radio-astronomic observations during the total solar eclipse of
February 15, 1961. During the total phase $q > 0$ and reaches $\sim 20\%$
of the total amount of radiation.

[Abstracter's note: Complete translation]

Card 1/1

S/203/63/003/002/011/027
D207/D307

AUTHORS: Nestorov, G. and Taubenblat, M. J.

TITLE: Investigation of the E layer of the ionosphere during the solar eclipse of February 15, 1961

PERIODICAL: Geomagnetizm i aeronomiya, v. 3, no. 2, 1963, 277-283

TEXT: The effective ionospheric recombination coefficient and the distribution of sources of ionizing radiation of the sun's disk were determined simultaneously during the total eclipse of February 15, 1961. For this purpose the critical frequencies f^oE of the normal E layer were calculated from measurements in Sofia and Nessebar in Bulgaria during this eclipse. The effective recombination coefficient in the E layer was found to be 10^{-7} cm/sec. This value was used to determine the dependence of the intensity of solar ionizing radiation on time during the eclipse: this dependence was almost exactly parallel to the simultaneously determined variation of the solar radio emission at $\lambda = 20$ cm. The results are:

Card 1/2

Investigation of the E layer

S/203/63/003/002/011/027
D207/D307

cate that 43% of the ionizing energy was emitted by two local regions on the eastern and western limbs of the solar disk near its equator. Acknowledgements are made to Doctor O. Khakhenberg for his interest and to Engineers G. Kober, L. Lange and K. Serafimov for carrying out ionospheric measurements and help in the analysis of ionograms. There are 4 figures and 1 table.

ASSOCIATION: Akademiya nauk Bolgarskoy narodnoy respubliki
Academy of Sciences of the Bulgarian People's Republic
(Institute Genrikha Gertsya, CDR (Heinrich Hertz Institute, East Germany)

SUBMITTED: September 12, 1962

Card 2/2

NESTOROV, G.; TAUBENHEIM, J.

New experimental data on the accumulation microprocess in ionospheric D-region. Doklady BAN 16 no.6:605-607 '63.

1. Vorgelegt von Akademiemitglied L. Krastanov [Krustanov, L.].

SERAFIMOV, K.; TAUBENHEIM, J.

Quasiperiodic oscillations of electronic density in the
F area of the ionosphere. Doklady BАН 16 no.7:709-712'63.

1. Vorgelegt van Akademiemitglied L.Krastanov [Krustanov,L.];
Chlen Redaktsionnoy kollegii i otvetstvennyy redaktor,
"Doklady Bolgarskoy Akademii nauk".

TAUBENSHLAK, P.G., inzhener.

Apparatus for machine riveting. Strei. i der.mashinostr. 1 no.3:36
Mr '56. (MIRA 10:1)

(Rivets and riveting)

7/16/62
YAROSLAVSKIY, A.M., inzhener; TAUBENSHLAK, P.G., inzhener.

Mechanization of fitting and assembly operations in manufacturing
electric tools. Stroil. i dor. mashinostr. 2 no.5:25-31 My '57.

(Electric machinery industry) (MIRA 10:6)

TAUBENSHLAK, P.G., inzh.

Mechanizing assembly work in construction and road machinery
plants. Stroitel'mashinostr. 4 no.4:28-34 Ap '59.
(MIRA 12:5)

(Assembly-line methods)

RAYTSESS, A.M., inzh.; CHERVYAKOV, V.I., inzh.; TAUBENSHLAK, P.G.;

[Universal means for the mechanization of fitting and assembling operations] Universal'nye sredstva mekhanizatsii slesarnykh i slesarno-sborochnykh rabot. Moskva, Otdel tekhn. informatsii, 1962. 132 p. (MIRA 15:11)

1. Russia (1917- R.S.F.S.R.) Moskovskiy gorodskoy ekonomicheskoy administrativnyy rayon. Sovet narodnogo khozyaystva.
2. Otdel avtomatizatsii i mekhanizatsii slesarnykh i slesarno-sborochnykh rabot. Moskovskogo gorodskogo soveta narodnogo khozyaystva (for Raytsess, Chervyakov).
3. Nachal'nik otdela avtomatizatsii i mekhanizatsii sborochnykh rabot Moskovskogo gorodskogo soveta narodnogo khozyaystva (for Taubenshlak).

(Machine-shop practice)

TAUBER, A.

Some observations on State Standard 4907-55 "Industrial constructions. Rules for Static calculation of construction elements under the loads of electric traveling cranes." p. 118.

(Standardizarea, Vol. 9, No. 3, Mar. 1957, Bucuresti, Rumania)

SO: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, No. 8, Aug 1957. Uncl.

TAUBER, Arnost, dr.

Symposium on the scientific research in agriculture and forestry
in underdeveloped countries. Vest ust zemedel ll no. 7:271-275
Jl '64.

1. Institute of Scientific and Technological Information,
Ministry of Agriculture, Forestry and Water Resources Management,
Prague.

KHAR'KOV, A.A., dots., otv. red.; RYVKIN, M.S., dots., red.;
MERZLYAKOVA, Z.S., st. prepod., red.; PARSHUKOV, B.V.,
st. prepod., red.; TAUBER, A.I., st. prepod., red.

[Abstracts of reports of the Zonal Scientific and technological Conference of Teachers of Physics, Methodology of Physics, and General Technical Subjects in the Pedagogical Institutes of Siberia and the Ural Mountain Region]
Tezisy dokladov Zonal'noy nauchno-tekhnicheskoy konferentsii
prepodavatelei fiziki, metodiki fiziki i obshchetekhnicheskikh
distsiplin pedagogicheskikh institutov Sibiri i Urala. Novosibirsk, Novosibirskii gos. pedagog. in-t, 1962. 167 p.

(MIRA 16:11)

1. Zonal'naya nauchno-tekhnicheskaya konferentsiya prepodavateley fiziki, metodiki fiziki i obshchetekhnicheskikh distsiplin pedagogicheskikh institutov Sibiri i Urala. 5th, 1962.

(Physics--Study and teaching)

(Technical education)

TAUBER, B. A. Docent

PA 45/49T32

USSR/Engineering
Welding, Autogenous
Locomotives

Mar 49

"Mechanization of Assembly-Welding Works," Docent
B. A. Tauber, Cand Tech Sci, 1 p

"Avtogennoye Delo" No 3

Explains how Kolomensk Locomotive-Bldg Plant modified the USA-2 nozzle for use in a setup for automatic welding of Series L locomotive boilers.

45/49T32

TAUBER, B. A.

Svarochno-svarochnye prispobleniia i mekhanizmy. Moskva, Mashgiz, 1951. 414 p. illus.
Bibliography: p. 413

Welding assembly jogs and mechanisms.

DLC: TS 227.T3

SO: Manufacturing and Mechanical Engineering in the Soviet Union. Library of Congress,
1953.

TAUBER, B. A.

Hoisting and transporting machinery in the lumber industry; textbook Moskva, Goslesbumizdat, 1952. 532 p. (54-18974)

TJ1350.T38

TAUBER, B.A.

GATSEVICH, V., inzhener.

Good textbook for schools of higher learning of the lumber industry
("Hoisting and transporting machinery in the lumber industry." [kandidat
tekhnicheskikh nauk] B.A.Tauber. Reviewed by V.Gatskevich). Les.prom.
14 no.4:p.3 of cover. Ap '54. (MLRA 7:4)
(Lumbering--Machinery) (Tauber, B.A.)

TAUBER, B. A., Doc Tech Sci -- (diss) "Bases of the Theory of Cable Grab Mechanisms." Mos, 1957. 42 pp with ill. (Min of Higher Education USSR, Mos Forestry Engineering Inst), 110 copies. List of author's works, p 42 (13 titles). (KL, 52-57, 106)

- 40 -

SOV/124-58-5-5031

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 13 (USSR)

AUTHOR: Tauber, B.A.

TITLE: A Structural Investigation of Scoop-bucket Mechanisms (Strukturnoye issledovaniye greyfernykh mekhanizmov)

PERIODICAL: Nauchn. tr. Mosk. lesotekhn. in-t, 1957, Nr 7, pp 5-34

ABSTRACT: An examination is made of the structure of various types of scoop-bucket mechanisms. The investigative procedure adopted is that of replacing the flexible links of a mechanism by corresponding rigid links; this makes it possible to use the Assur method for the structural analysis of the mechanisms.

V.A. Zinov'ev

1. Dippers--Structural analysis
2. Dippers--Test methods
3. Mechanics

Card 1/1

SOV/124-58-5-5030

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 13 (USSR)

AUTHOR: Tauber, B.A.

TITLE: A Kinematic Investigation of Scoop-bucket Mechanisms (Kinematicheskoye issledovaniye greyfernykh mekhanizmov)

PERIODICAL: Nauchn. tr. Mosk. lesotekhn. in-t, 1957, Nr 7, pp 35-60

ABSTRACT: A method is expounded for plotting scooping curves for scoop buckets, taking into account the factors influencing the shape of the curves. The author deals also with the question of determining the respective velocities and accelerations of the links of a scoop-bucket linkage. The methods proposed are used to investigate the influence exerted by the shape of a scoop-bucket's jaws on its scooping action.

V.A. Zinov'yev

1. Dippers--Performance
2. Dynamics
3. Mechanics
4. Mathematics--Applications

Card 1/1

TAUBER, B.A., dots., kand.tekhn.nauk

Experimental investigation of vibration bucket hoists used for
lifting long-sized lumber. Nauch.trudy MMTI no.7:119-138 '57.
(MIRA 11:11)
(Lumbering--Machinery)

TAUBER, B.A., kand.tekhn.nauk

Mechanizing loading at the lower landing. Mekh.trud.rab. 11
no.9:36-38 S '57. (MIRA 10:11)
(Lumbering) (Loading and unloading)

TAUBER, B.A., kand.tekhn.nauk, dotsent.

Theory and design of cable grab mechanisms. Vest.mash. 37 no.10:3-12
0 '57. (MIRA 10:11)

(Excavating machinery)

(Mechanical movements)

TAUBER, D. A.

AUTHOR: None Given

SOV-118-58-7-7/20

TITLE: A Scientific-Technical Conference on Questions Regarding the Mechanization of the Lumber Industry (Nauchno-tehnicheskaya konferentsiya po voprosam mekhanizatsii v lesnoy promyshlennosti)

PERIODICAL: Mekhanizatsiya trudoyemkikh i tyazhelykh rabot, 1958, Nr 7, p 19, (USSR)

ABSTRACT: In May 1958, the Moskovskiy lesotekhnicheskii institut (the Moscow Institute of Forest Engineering) called a scientific conference. Attending were approximately 300 persons, among them representatives from the Gor'kovskiy (Gor'kiy), Kalininskiy (Kalinin), Kirovskiy (Kirov), Komi, Permskiy (Perm'), Tyumenskiy (Tyumen') and Moskovskiy (Moscow) sovnarkhozes. Also attending were delegates from big lumber enterprises, lumber mills, furniture factories; the Gosudarstvennyy nauchno-tehnicheskii komitet Soveta Ministrov SSSR (State Scientific Technical Committee of the USSR Council of Ministers), the USSR Gosplan, the TsNIIME, the TsNIIMOD, the Giprolesprom and from other organizations. The Member-Correspondent of the VASKhNIL, N.P. Anuchin reported on the future development of the Soviet lumber industry (1959 to 1965). The Chief Engineer of the Krestetskiy-lespromkhoz TsNIIME (the Kresttsy Lespromkhoz) reported on a semi-automatic conveyor line introduced at

Card 1/ 3

SOV-118-58-7-7/27

A Scientific-Technical Conference on Questions Regarding the Mechanization of the Lumber Industry

the Krasttsy lespromkhoz. The Candidate of Technical Sciences, B.A. Tauber delivered a report on the mechanization of lumber loading and stacking operations. The following reports were also heard: Dotsent N.I. Suboch - "The Present State and Development **Methods of Traction Machinery in** Lumber Transportation"; Dotsent M.I. Saltykov - "The All-Round Utilization of Raw Material and the Organization of Lumber Industry on the Principle of Continuous Forest Use"; Candidate of Technical Sciences, G.A. Vil'ke - "The Vibration of Gasoline Motor Saws"; scientific worker, V.V. Kharitonov - "Choosing a Method of Bark Stripping"; Dotsent M.I. Kishinskiy - "The Transportation of Lumber by Motor Transport in Winter"; Professor M.I. Zaychik - "The Exploitation of Diesel Engines at Shops"; Professor N.N. Chulitskiy - "Investigations on New Technological Equipment for Production Line and Automated Furniture Production"; Head of the Tekhnologicheskii otdel proyektnogo instituta Nr 2 (Technological Division of the Nr 2 Design - Institute), V.A.

Card 2/3

SOV-118-58-7-7/27

A Scientific-Technical Conference on Questions Regarding the Mechanization
of the Lumber Industry

Tselebrovskiy - "Mechanization and Automation of Production Processes at the Raw Material Exchange Center of the Omutninsk House Construction Combine".

1. Lumber industry--USSR

Card 3/3

TAUBER, Boris Abramovich, prof., doktor tekhn.nauk; GORA, V.Ye., inzh.,
retsensent; SYTHIK, N.A., inzh., red.; CHERNOVA, Z.I., tekhn.red.

[Grab mechanisms; theory, design, and construction] Greifernye
mekhanizmy; teoriia, raschet i konstruktsii. Moskva, Gos.nauchno-
tekhn.izd-vo mashinostroit.lit-ry, 1960. 326 p.

(MIRA 13:11)

(Cranes, derricks, etc) (Excavating machinery)

TAUBER, B.A., prof. doktor tekhn. nauk

Some problems in the kinematics and dynamics of grab mechanisms.
Nauch. trudy MLTI no.11:5-30 '61 (MIRA 18:1)

MOVNIN, Mikhail Savel'yevich, doktor tekhn. nauk, prof.; MITINSKIY, Arsenii Nikolayevich, prof.[deceased]; prinyal uchastiye: GOL'TSIKER, D.G., inzh.; BORISOV, V.N., dotsent, kand. tekhn. nauk, retsenzent; SAMUYLO, V.O., V.O.dots., retsenzent; TAUBER, B.A., prof., retsenzent; CHERNAVSKIY, S.A., dotsent, retsenzent; ITSKOVICH, G.M., inzh., nauchnyy red.; PITERMAN, Ye.L., red. izd-va; PARAKHINA, N.L., tekhn. red.

[Technical mechanics; strength of materials, theory of mechanisms and machines. Machine parts] Tekhnicheskaya mekhanika; soprotivleniye materialov; teoriya mekhanizmov i mashin. Detali mashin. Izd. 2., perar. Moskva, Goslesbumizdat, 1961. 781 p. (MIRA 14:6)

(Mechanical engineering) (Strength of materials)

TAUBER, Boris Abramovich, prof., doktor tekhn. nauk; FROLOV, A.V.,
retsenzent; MUSINYAN, T.M., red.; PROTANSKAYA, I.V., red.
izd-va; VDOVINA, V.M., tekhn. red.

[Hoisting and conveying machines] Pod'emno-transportnye ma-
shiny. 2. izd. Moskva, Goslesbumizdat, 1962. 633 p.
(MIRA 16:5)

1. Glavnyy konstruktor Gosudarstvennogo instituta po pro-
yektirovaniyu novykh mashin dlya lesozagotovok i splava
(for Frolov).

(Hoisting machinery) (Conveying machinery)

PLOTNIKOV, M.A.; YEVSTIFEYEVA, T.V.; TAUBER, B.A.; PETROV, V.Ye.;
ZAV'YALOV, M.A.; NAZAROV, V.V.; ANOPOL'SKIY, M.G.;
OBRAZTSOV, S.A.; BAMM, A.I.; GATSEVICH, V.A.; CHEVAZHEVSKIY,
A.P.; ERANISHNIKOV, L.G., retsenzent; ALKEYEV, N.P., otv.
red.; SLUTSKER, M.Z., red. izd-va; VDOVINA, V.M., tekhn.
red.

[Lumbering camps; mechanization of work at lower timber
landings. A handbook] Lesozagotovki; mekhanizatsia rabot na
nizhnikh skladakh. Spravochnik. Moskva, Goslesbumizdat, 1962.
441 p. (MIRA 16:6)

(Lumbering)

SOURCE: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 7, 1968, is 17
- the name of the product storage facility, industrial automation, crane, hoist-

Card 1/2

1200000000 125018523

1. The first part of the report is a summary of the work done during the period from 1 January 1961 to 31 December 1961. It is divided into two main sections: (a) a summary of the work done during the period from 1 January 1961 to 31 December 1961, and (b) a summary of the work done during the period from 1 January 1962 to 31 December 1962.

2. The second part of the report is a detailed account of the work done during the period from 1 January 1961 to 31 December 1961. It is divided into two main sections: (a) a summary of the work done during the period from 1 January 1961 to 31 December 1961, and (b) a summary of the work done during the period from 1 January 1962 to 31 December 1962.

SUB CODE 125018523

TAUBER, B.A., doktor tekhn. nauk

Basic trends in the mechanization of lumber loading, unloading
and storage operations. Mekh. i avtom. proizv. 19 no.7:13-18
Jl '65. (MIRA 18:9)

TAUBER, B. M.

The Antarctic. Part I: Fundamental features of climate and weather.
(In Russian)
Leningrad, Hydrometeorological Publishing House, 1956,
148 p., num. figs., tables, charts.

AVB PR, C M.

4

77-53
 *Taubert, G. M. K kharakteristike vozdukhnykh mass nad O. Diksen. [On the properties of air masses over Dickson Island.] *Meteorologiya i Gidrologiya*, No. 9/10:88-99, 1938. 6 figs.

551.515.8:551.52.4

9 tables. DWB. - English summary with tabular data available as: Stone, R. G., The lapse rates in different air masses at Dickson Island, West Siberia. *American Meteorological Society, Bulletin*, 20(9):376-378, No. 1039. DWB. - Of 65 radiosondeograph soundings made at Dickson Island in 1935-37, 80% contained one or more inversions. Soundings were made in every month, but mainly in the spring and summer. Tables give the number of cases with inversion bases and tops in specified height ranges according to air mass and frequencies of specified amounts of temperature increase. The majority of the inversions were below 1000 m, the bases mostly between 150 and 600 m and the tops mostly between 1000 and 1400 m. Some dependence of surface radiation were factors in the formation of inversions. Summary in Russian. Jan 1936. 11 p. Subject headings: 1. Temperature inversions. 2. Temperature gradient in Arctic. 3. Lapse rates. 4. Dickson Island. -R.S.Q.

ACR

TANDER, G. M. Cand. Geograph. Sci.

Dissertation: "Aerosynoptic Characteristics of the Region of Dixon Island." Central
Inst. of Weather Forecasting." (May 47.

SO: Vechernyaya Moskva, May, 1947 (Project #17036)

TAUBER, G. M.

25612 TAUBER, G. M. Plavanie V Antarktike V 1947-1948 G G.
Izvesiya Vsesoyuz Geogr. O-Va. 1949, Vyp. 4, S. 369-85

So: Letopis' Zhurnal'nykh Statey, Vol. 34, Moshva, 1949

TAUBER, G. M. and others

Hydrometeorological observations on board of the whaling base Slava...1947
(In Russian)
Trudy Ocean. Inst., Leningrad, v. 14 (26), 1949; 19 (31), 1957
24 (36), 1954; 25 (37), 1957.

TAUBER, G. M.

Climate - Antarctic Regions

Climate in Antarctica. Geog.v shkole No. 4 1952.

Monthly List of Russian Accessions, Library of Congress October 1952 UNCLASSIFIED

TAUBER, G. M.

PA 245T90

USSR/Meteorology - Ship Observations

Nov 52

"Hydrometeorology Observations at Sea," G. M. Tauber,
Cand Geog Sci, State Oceanographic Inst, Moscow

"Meteorol i Gidrol" No 11, pp 53-56

Stresses the importance of observations obtained from
sea-going vessels. Suggests the equipping of ships
with instruments for observational purposes.

245T90

TAUBER, G. M.

Shipboard Measurements of the Temperature of Air Meteorol. i. gidrologiya,
No 2, 1953, pp 49-51

For the measurement of the temperature of air aboard ship a simple device is recommended. It consists of a thermometer in a metal case, the reservoir of which is supplied with three cone-shaped shields made of thin metal with polished and nickel-plated, or smoothly painted, surface. As shown by numerous comparisons with parallel readings of the aspiration psychrometer, the recommended device gives completely satisfactory results during sailing under various geographical and climatic conditions. (RZhGeol, No 5, 1954)

SO: Sum. No. 568, 6 Jul 55

TAUBER, G. M.

Experience in the Employment of the Electric Anemorhumbometer (ARME-1)
Aboard Ship. Meteorol. i gidrologiya, No 4, 1953, pp 49-51

The author presents the results of an investigation of an experimental specimen of the anemorhumbometer of the type ARME-1 during the expedition of the State Oceanographic Institute at the whaler base "Slave" in the Antarctic during 1950-1951. For control the readings averaged over 200 seconds were compared within 20 seconds according to the anemorhumbometer with the paralleled determinations according to the ordinary manual anemometer. The author presents the most essential characteristics of the operation of the device under conditions of storms, edge tossing, icing, and intense corrosion of individual parts of the device. Tests conducted in the course of 6 months indicated the reliability of operation of the device on the whole and the reliability of its electrical contact system in particular. The author recommends some improvements in the constructional design of the device for its series production. (RZhGeol, No 5, 1954)

SO: Sum. No. 568, 6 Jul 55

TAUBER, G.M.

Expeditionary work in the Antarctic in 1949/50. Trudy GOIN no.24:
5-12 '54. (MLRA 9:11)
(Antarctic regions--Scientific expeditions)

TAUBER, G. M.

"Meteorological Conditions of the Whaling Season 1949-1950 in the Regions of
Operation of the Whaler "Slava-15".
Trudy Gos. okeanogr. in-ta, No 24, pp 13-20, 1954.

The characteristics of the meteorological conditions surrounding the operating season are given according to the principal weather elements and according to individual regions. Noted is the chief peculiarity of a given season, namely small frequency of storms and prevalence of good visibility, which has been related to the weak development of cyclonic activity in the North Atlantic Ocean. The author indicates the dependence between seasonal displacement of antarctic front to the north and seasonal movement of the floating ice rim in the same direction; during the period from November to December it amounts, according to maps, to 12° - 14° along the latitude, characterizing the annual displacement. (RZhGeol, No 7, 1955)

SO: Sum No 884, 9 Apr 1956

TAUBER, G. M.

Antarktika, Chast' 1. Osnovnyye cherty klimata i pogody [Anarctic. Part
1. Main features of climate and weather], 1956

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755120007-3

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755120007-3"

TAUBER, G.M.

Main climatic features of the Antarctic. Meteor. i gidrol. no.1:
13-18 Ja '56. (MIRA 9:6)
(Antarctic regions--Climate)

TAUBER, G.M.

~~SECRET~~
Aerological and meteorological investigations in the Antarctic by
the First Soviet Antarctic Expedition in 1955-1957. Meteor. i gidrol
no.6:3-11. Je '57. (MIRA 10:8)

(Antarctic regions)
(Meteorology)

TAUBER, G.M.

AUTHOR: Kolobkov, N. V.

50-58-3-20/22

TITLE: The Meteorological Commission of the Moscow Branch of the Geographical Society of the USSR (Meteorologicheskaya komissiya Moskovskogo filiala Geograficheskogo Obshchestva SSSR)

PERIODICLA: Meteorologiya i Gidrologiya, 1958, Nr 3, p. 69 (USSR)

ABSTRACT: On November 16, 1957 a meeting of the Meteorological Commission of the Moscow Branch of the Geographical Society of the USSR was held at the Moscow Lomonosov State University. The meeting began with a lecture by G. M. Tauber on the subject "Peculiarities of the Meteorological Conditions of the Antarctic.". The main work of this commission is divided into the following sections: lectures and their discussion on the last scientific achievements of meteorology, informations on meteorological science in the USSR and abroad, examination of notes and papers on meteorological subjects of special interest, arrangement of guided excursions, participation in public measures, explanatory work in problems of meteorology, contributions to scientific research subjects, scientific

Card 1/2

The Meteorological Commission of the Moscow Branch of the 50-58-3-20/22
Geographical Society of the USSR

contact with meteorological societies abroad etc.

1. Meteorology--USSR

Card 2/2

TAUBER, Georgiy Mikhaylovkch, doktor geograf.nauk; SEN'KO, Pavel
Kononovich, kand.geograf.nauk; DOLGUSHIN, Leonid Dmitriyevich,
kand.geograf.nauk; MEL'NIKOVA, N.B., red.; STRELKOVA, N.A.,
red.izd-va; ATROSHCHENKO, L.Ye., tekhn.red.

[Soviet scientists on the sixth continent] Sovetskie uchenye
na shestom kontinente. Moskva, Izd-vo "Znanie," 1959. 31 p.
(Vsesoiuznoe obshchestvo po rasprostraneniю politicheskikh i
nauchnykh znaniy. Ser.9, Fizika i khimiya, no.21)

(MIRA 12:11)

(Antarctic regions)

TAUBER, G.M.

(12)

RUSSIAN CONFERENCE ON PROBLEMS OF METEOROLOGICAL OBSERVATION, MOSCOW, 1979

Tselya doklady (theses of reports at the Scientific Conference on Meteorological Problems in Antarctica, Moscow, 1979) Moscow, Gidrometizdat (Gid-met) 1979. 17 p. 1,000 copies printed.

Ed.: G.D. Krivak; Tech. Ed.: I.M. Zarb.

PURPOSE: The publication is intended for meteorologists, particularly for those interested in the climatology of Antarctica.

CONTENTS: This book contains summaries of thirty-five reports presented at the Scientific Conference on Meteorological Problems in Antarctica, held in Moscow, October 26 to 28, 1979. The summaries are arranged in four groups: (1) general problems of the geography of Antarctica; (2) atmospheric circulation; (3) radiation balance; (4) heat balance, climate and special features of individual elements; (5) methods of observation and measurement. No personalities are mentioned. There are no references.

PART III. RADIATION BALANCE, HEAT BALANCE, CLIMATE, AND THE CLIMATOLOGY OF INDIVIDUAL ELEMENTS

20. Belskiy, G.P. [Candidate of Geographical Sciences, Glavnaya geofizicheskaya observatoriya im. A.I. Voznyakova (Main Geophysical Observatory im. A.I. Voznyakov)] Radiation Balance of the Surface of the Snow in Antarctica
21. Belov, V.P. [Candidate of Physics and Mathematics, Tsentral'naya aerologicheskaya observatoriya (Central Aerological Observatory)] Shortwave Radiation Balance in the Troposphere, and Albedo of the Underlying Surface of the Antarctic Elze and the Davis Sea According to the Results of Aerological Observations From Aircraft
22. Belskiy, G.P. [Main Geophysical Observatory im. A.I. Voznyakov] Turbulent Heat and Humidity Exchange in the Air Layer Near the Ground in Antarctica
23. Bogdanov, V.A. [Central Forecasting Institute] Climatic Zones of Eastern Antarctica
24. Belyukov, Z.P. [Candidate of Geographical Sciences] and B.I. Stakhovskiy [Candidate of Geographical Sciences] Mean Monthly Fields of Air Pressure and Temperature Over Antarctica and the Southern Hemisphere
25. Danilov, R.P. [Candidate of Geographical Sciences, Tsentral'nyy institut prognozov (Central Forecasting Institute)] Geophysical Basis for the Circulation Between the Antarctic Low-Pressure Zone and the Belt of Antarctic Submarine Troughs
26. Omer, A.M. [Institute of Applied Geophysics, AS USSR] Physical Causes of the Climatic Feature in the Interior Regions of Antarctica
27. Tauber, G.M. [State Oceanographic Institute] Characteristics of Deserinda (Deserinda) in Antarctica
28. Dolanov, I.K. [Candidate of Geographical Sciences, Arkhimeshskiy i Arkhimeshskiy nauchno-issledovatel'skiy institut (Scientific Research Institute of Arctic and Antarctic)] Special Features of the Relief of Eastern Antarctica in Relation to Weather Characteristics
29. Lobodin, V.V. [Glavnaya geofizicheskaya observatoriya im. A.I. Voznyakova (Main Geophysical Observatory im. A.I. Voznyakov)] Investigation of the Electric Field
30. Kuznetsov, Z.D. [Candidate of Geographical Sciences, Glavnaya geofizicheskaya observatoriya im. A.I. Voznyakova (Main Geophysical Observatory im. A.I. Voznyakov)] Conditions for the Formation of the Snow Cover in Antarctica

Card 6/9

TAUBER, G.M.

3(3)	PHASE I BOOK EXPLOITATION	307/3223
	<p>Atkandya nauk SSSR. Kompleksnaya antarkticheskaya ekspeditsiya Klimat Antarktiki (Climate of the Antarctic) Moscow, Geografiz 1959. 285 p. (Series: Iti: Trudy Meteorologiya i Klimatologiya) Karta alip inserted. 4,000 copies printed.</p> <p>Ed.: S. M. Rubins; Tech. Ed.: S. M. Koshaleva; Editorial Board: Y. P. Burdakov, B. L. Dardseyevskiy, Kh. P. Pogozyan, and G. M. Tauber.</p> <p>PURPOSE: This book is intended for meteorologists and climatologists. It will be of interest to all earth scientists concerned with the Antarctic region.</p> <p>COVERAGE: This book contains 18 articles on the weather and climate of Antarctica. Articles represent the generalized results of processing data obtained by the Soviets during their expeditions to the Antarctic, 1955-1958. Individual authors have attempted to clarify and unify previously divergent views on Antarctic meteorological processes (zonal circulation, temperature distributions, cyclonic and anticyclonic movement, etc.). No personalities are mentioned. References accompany individual articles.</p>	
	<p>TABLE OF CONTENTS:</p>	
	Foreword	5
	Burdakov, Y. P. Investigating the Climate of the Antarctic	7
	Tauber, G. M. Some Particular Features of Atmospheric Pro- cesses in the Antarctic	28
	Leonor, H. G. The Nature of Zonal Circulation Over the Eastern Shore of Antarctica	79
	Quay, A. M. Theoretical Outline of Air Circulation Over the Antarctic	92
	Quay, A. M., and M. Y. Rusin. The Meteorological Charac- teristic of the Interior Region of East Antarctica According to the Observations at Pionerskaya Station	102
	Rastorguev, V. I., and Kh. Alvaras. Description of Antarctic Circulation as Observed From April to November 1957	110
	Dzardzaryan, B. L. The Weather in the Antarctic During the Voyage of the Research Ship "Lena" in 1957. Some Problems of the Meteorology of the Southern Polar Region.	168
	Polev, V. Y. Problem of Accuracy in Computing Pressure Maps From Ground Level Data	210
	Pogozyan, Kh. P. The Atmospheric Circulation in the Antarctic	216
	Zhdanov, L. L. On the Characteristic of Synoptical Processes in the Southern Hemisphere in the Summer of 1955-1956	252
	Rastorguev, V. I. Problem of the Distribution of Temperature in the Free Atmosphere Over Antarctica	263
	Rineplinskiy, G. V. Some Results of the Stereophoto- grammetric Survey of Waves in Antarctic Waters	266
	Chernov, Yu. A. Survey of Synoptical Conditions and Weather During the Period From July 23 to August 3, 1957	270
	Chernov, Yu. A. The Hurricanes in the Mirny Region During the Night of August 14-15, 1957	274

TAUBER, G.M.

13

PLAN I BOOK EXPLANATION 807/566

Nauchaya konferentsiya po problemam meteorologicheskoi Antarktiki, Moscow, 1959
Tseyly doklady (Theses of Reports at the Scientific Conference on Meteorological Problems in Antarctica, Moscow, 1959) Moscow, Gidrometeoizdat (Gidmetiz) 1959. 47 p. 1,000 copies printed.

Ed.: G.G. Eriukhin; Tech. Ed.: I.M. Zarba.

PURPOSE: The publication is intended for meteorologists, particularly for those interested in the climatology of Antarctica.

Contents: This book contains summaries of thirty-five reports presented at the Scientific Conference on Meteorological Problems in Antarctica, held in Moscow, October 26 to 28, 1959. The summaries are arranged in four groups: (1) general problems of the geography of Antarctica; (2) general atmospheric circulation; (3) radiation balance; (4) meteorological climate and special features of individual elements; (5) methods of observation and measurement. No personalities are mentioned. There are no references.

PART I. GENERAL GEOGRAPHICAL FEATURES

Reuter, V.A. [Candidate of Physics and Mathematics, Tsentrallyy Institut prognozov (Central Forecasting Institute)] and Ye. I. Zhil'tsin [Candidate of Geographical Sciences, Tsentrallyy upravleniye Severnogo morskogo puti (Main Administration of the Northern Sea Route)] Main Relief Features of Eastern Antarctica

Medel', Yu.M. [Candidate of Geographical Sciences, Tsentrallyy geograficheskii Institut (Institute of Geography, AS USSR)], and A.V. Rud'kova [Candidate of Geographical Sciences, Tsentrallyy upravleniye Severnogo morskogo puti (Main Administration of the Northern Sea Route)] Ice in the Antarctic Ocean, its Thickness and the Matter of Underlying Rock

PART II. ATMOSPHERIC CIRCULATION

Tauber, G.M. [Doctor of Geographical Sciences, Gosudarstvennyy gidrometeorologicheskii nauchno-issledovatel'skiy tsentr (State Scientific Center for Hydrometeorology and the Indian Sector of Antarctica)] Climatic Cyclones in the Western Part of the Indian Sector of Antarctica

Gerasimov, A.M. [Professor, Doctor of Physics and Mathematics, Institut prikladnoy geograficheskoy fiziki (Institute of Applied Geophysics, AS USSR)] Theoretical Diagram of Air Circulation Over Antarctica

Krasov, S.P. [Professor, Doctor of Geographical Sciences, Moscowskiy gosudarstvennyy universitet im. M.V. Lomonosova (Moscow State University)] Special Features of Summer Circulation and Weather in the Antarctic Waters According to Observations from the "Gye" in 1956-1957

Eriukhin, G.G. [Candidate of Geographical Sciences, Tsentrallyy Institut prognozov (Central Forecasting Institute)] Atmospheric Circulation in Antarctica and the Northern Hemisphere

Gerasimov, S.G. [Candidate of Geographical Sciences, Tsentrallyy nauchno-issledovatel'skiy tsentr (Central Scientific Center)] Some Special Features of Circulation and Structure of the Atmosphere in Antarctica and the Central Arctic

Tolstikov, Ye.I. [Main Administration of the Northern Sea Route] Air Masses in Eastern Antarctica

Alferenko, P.D. [Docent, Candidate of Geographical Sciences, Leningradskiy gosudarstvennyy nauchno-issledovatel'skiy tsentr (Leningrad State Scientific Center)] Development of Synoptic Processes Over Western Antarctica

Pogorelen, Kh.F. [Professor, Doctor of Geographical Sciences, Tsentrallyy Institut prognozov (Central Forecasting Institute)] Special Features of the Temperature at High Altitudes and of Atmospheric Circulation in Antarctica

Gerasimov, G.Y. [Gosudarstvennyy nauchno-issledovatel'skiy gidrometeorologicheskii tsentr (State Scientific Center for Hydrometeorology and the Indian Sector of Antarctica)] Problems of Studying Secondary Circulation by Means of Microturbulence Characteristics

Shapovalov, V.M. [Professor, Doctor of Geographical Sciences, Leningradskiy gosudarstvennyy nauchno-issledovatel'skiy tsentr (Leningrad State Scientific Center)] Some Special Features of the Regeneration of Cyclones on the Antarctic Peninsula

SOMOV, M.M., doktor geograf.nauk, red.; TAUBER, G.M., doktor geograf.
nauk, red.; DOLOIN, I.M., kand.geograf.nauk, red.; ZVEREV, A.A.,
kand.geograf.nauk, red.; DROZHZHINA, L.P., tekhn.red.

[Materials of the Soviet Complex Antarctic Expedition] Materialy
Sovetskoi kompleksnoi antarkticheskoi ekspeditsii. Leningrad,
Izd-vo "Morskoi transport." Vol.2. [First Continental Expedition,
1955-1957; scientific results] Pervaia kontinental'naia ekspeditsiia,
1955-1957 gg.; nauchnye resul'taty. Pod red. M.M.Somova. 1959.
161 p. Vol.3. [First Continental Expedition, 1955-1957; observation
data] Pervaia kontinental'naia ekspeditsiia, 1955-1957 gg.; materialy
nabliudenii. Pod red. G.M.Taubera. 1959. 459 p. Vol.4. [First
Continental Expedition, 1955-1957; observation data] Pervaia konti-
nental'naia ekspeditsiia, 1955-1957 gg.; materialy nabliudenii. Pod
red.G.M.Tauber, I.M.Dolgina. 1959. 482 p. Vol.6. [Second Marine
Expedition in the diesel-electric ship "Ob'", 1956-1957; observation
data] Vtoraia morskaiia ekspeditsiia na d/e "Ob'", 1956-1957 gg.;
materialy nabliudenii. Pod red. A.A.Zvereva. 1959. 386 p.
(MIRA 13:3)

1. Sovetskaya kompleksnaya antarkticheskaya ekspeditsiya, 1955-1958.
(Antarctic regions--Russian exploration)

PHASE I BOOK EXPLOITATION

SOV/4339

Antarctica (G.M.)
Sovetskaya antarkticheskaya ekspeditsiya, 1955-

Pervaya kontinental'naya ekspeditsiya 1955-1957 gg.; nauchnyye rezul'taty (First Continental Expedition, 1955-1957; Scientific Results) Leningrad, Izd-vo "Morskoy transport," 1959. 161 p. 2,000 copies printed. (Series: Itz: Materialy, tom 2)

Sponsoring Agency: Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.

Ed.: M.M. Somov, Doctor of Geographical Sciences; Tech. Ed.: L.P. Drozhzhina.

PURPOSE: This book is intended for polar specialists, geographers, geologists, meteorologists, and geophysicists.

COVERAGE: This book is Volume 2 of a multivolume work containing scientific data collected by the First Soviet Continental Expedition to the Antarctic (1955-57), sent out under the auspices of the Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut (Arctic and Antarctic Scientific Research Institute) as part of the IGY program. The purpose of the expedition was to survey an area between 74 to 111°E longitude and 59 to 70°S latitude (an area of about 1

Card 1/4

First Continental Expedition (Cont.)

SOV/4339

million square kilometers), to develop methods and techniques for field studies applicable to local conditions, and to initiate a systematic study of the natural phenomena of the region. Ground and aerial observations were conducted in the more interesting areas around and between Mirnyy and Pionerskaya, in the three oases of Grierson, Bunger, and Vestfold, on the Shackleton Ice Shelf, Drygalski Island, and a number of nunataks (Amundsen, Gauss, etc.). Geological, geographic, and geophysical observations were made at the Mirnyy Observatory and at the Pionerskaya and Oazis research stations. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Introduction	5
Korotkevich, Ye.S. General Physical Geographic Characteristics of the Expedition's Area of Operation	6
Voronov, P.S. Geological Structure of the Expedition's Area of Operation	19
Rusin, N.P. Some Characteristics of the Radiation and Thermal Balance of East Antarctica	39
Card 2/4	

First Continental Expedition (Cont.)

SOV/4339

Tauber, G.M. Synoptic Conditions in the Indian Ocean Sector of the Antarctic	46
X Tauber, G.M. Characteristics of Meteorological Conditions in the Antarctic in 1956	49
Rusin, N.P. Meteorological Characteristics in the Region Around the Mirnyy Observatory	55
Gusev, A.M., and N.P. Rusin. Meteorological Characteristics of the Glacier Slope of East Antarctica	68
and Vtyurin, B.I., L.D. Dolgushin, A.P. Kapitsa, Yu.M. Model'. Contemporary Ice Cover of East Antarctica and Its Dynamics	73
Korotkevich, Ye.S. Ice Regime of the Davis Sea and Adjacent Regions of the Ocean	93
Korotkevich, Ye.S. Biogeographic Characteristics of the Expedition's Area of Operation	104
Card 3/4	

First Continental Expedition (Cont.)

SOV/4339

Bukin, G.V. Ionospheric Observations	111
Sen'ko, P.K. Magnetic Field in the Region of Mirnyy	115
Sen'ko, P.K., and V.A. Troitskaya. Investigation of Telluric Currents in the Region of Mirnyy	135
Sytinskiy, A.D. Seismic Observations in Mirnyy	153
Paleyev, N.R. Medical Studies in East Antarctica	157
AVAILABLE: Library of Congress (G860.S58)	

Card 4/4

JA/dwm/sfm
11-21-60

BURKHANOV, V.F., red.; DZERDZHEYEVSKIY, B.L., red.; POGOSYAN, Kh.P.,
red.; TAUBER, G.M., red.; KUMKES, S.N., red.; MAL'CHEVSKIY,
G.N., red.kart; KOSHELEVA, S.M., tekhn.red.

[The climate of Antarctica] Klimat Antarktiki. Moskva, Gos.
izd-vo geogr.lit-ry, 1959. 285 p. (MIRA 12:11)

1. Akademiya nauk SSSR. Kompleksnaya antarkticheskaya ekspeditsiya, 1955- .
(Antarctic regions--Climate)

TAUBER, G. M.

PHASE I BOOK EXPLOITATION SOV/4341

Sovetskaya antarkticheskaya ekspeditsiya

Pervaya kontinental'naya ekspeditsiya 1955-1957 gg.: materialy nablyudeniy (First Continental Expedition, 1955-1957; Materials From Observations) Leningrad, Izd-vo Morskoy transport, 1959. 482 p. Errata slip inserted. 800 copies printed. (Series: Its: Materialy, tom. 4)

Sponsoring Agency: Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.

Eds.: G. M. Tauber, Doctor of Geography, and I. M. Dolgin, Candidate of Geography; Tech. Ed.: L. P. Drozhzhina.

PURPOSE: This book is intended for meteorologists and geophysicists.

COVERAGE: This volume, representing the fourth in a series containing data collected during the First Soviet Continental Expedition to the Antarctic (1955-57), is a compilation of aerological observations. The observations

Card 1/4

First Continental Expedition (Cont.)

SOV/4341

were made by radiosonde, pilot balloon, and radio pilot from the observatory at Mirnyy, the research station at Pionerskaya, the research ships "Lena" and "Kooperatsiya", Temporary Station no. 4, and during a tractor-drawn sled expedition. The data shown in the tables were computed by the method of mean algebraic values. Mean values for temperature, pressure and wind velocity, and extreme values for temperature were computed on the basis of not less than a series of five observations, and wind direction recurrence by not less than ten observations. The mean values are shown together with the number of observations made during each month. The aerological data was processed and prepared for publication at the Tsentral'naya aerologicheskaya observatoriya (Central Aerological Observatory) by R. A. Belogurova, N. A. Yefimova, Ya. M. Korpich, M. M. Kolomiytseva, R. A. Zagudayeva, G. A. Karpova, D. A. Ustinovich, A. M. Komarova, K. Ya. Nikishova, and Candidate of Geographic Sciences D. A. Murav'yeva. Data was processed under the general direction of Candidate of Geographic Sciences M. A. Zolotarev. A critical analysis of the observations was made by T. A. Tsitovich. The

Card 2/4

First Continental Expedition (Cont.)

SOY/4341

aeroclimatic processing of data gathered at Mirnyy was performed at the Division of Climate of the Arctic and Antarctic Scientific Research Institute, by Junior Scientific Worker L. P. Nikandrov, Engineer A. N. Vorob'yev, and Senior Technician V. A. Kharitonov, under the supervision of Junior Scientific Worker S. I. Sokolov. No references are given.

TABLE OF CONTENTS:

Introduction

5

AEROLOGY

Aerological Observations

6

Table 1. Wind-temperature soundings

12

Table 2. Pilot-balloon observations

439

Table 3. Radio-pilot observations

454

Table 4. Mean monthly temperature

472

Table 5. Maximum temperature values

473

Table 6. Minimum temperature values

474

Card 3/4

First Continental Expedition (Cont.)

SOV/4341

Table 7. Mean monthly pressure	475
Table 8. Mean monthly velocity of wind	476
Table 9. Recurrence of wind direction	477

AVAILABLE: Library of Congress (0860.858)

Card 4/4

JA/dwm/ec
10-31-60

SOMOV, M.M., otv. red.; MAKSIMOV, I.V., zamestitel' otv.red.; TRESHNIKOV, A.F., zamestitel' otv.red.; ANDRIYASHEV, A.P., red.; BUYNITSKIY, V.Kh., red.; VORONOV, P.S., red.; DOLGIN, I.M., red.; KALZSNIK, S.V., red.; KOROTKEVICH, Ye.S., red.; NIKOL'SKIY, A.P., red.; RAVICH, M.G., red.; TAUBER, G.M., red.; FROLOV, V.V., red.; SLEVICH, S.B., red.; KAPLINSKAYA, L.G., red.izd-va; DROZHZHINA, L.P., tekhn.red.

[Report on observations completed by the Soviet Antarctic Expedition in 1957 and 1958] Otchet o nabludeniakh, vypolnennykh Sovetskoi antarkticheskoi ekspeditsiei v 1957 i 1958 gg. Sovetskaya antarkticheskaya ekspeditsiya, 1955-1958. Leningrad, Izd-vo "Morskoi transport," 1960. 39 p (Informatsionnyi biulleten', no.15) (MIRA 13:6)

(Antarctic regions--Russian exploration)

S/169/63/000/003/028/042
D263/D307

AUTHOR: Tauber, G.M.

TITLE: On the problem of seasonal variations of circulation
in the troposphere and the lower stratosphere over
Antarctica

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 3, 1963, 39,
abstract 5D228 (In collection: Materialy konferentsii
po itogam MGG (1960) i meteorol. izuch. Antarktity
(1959), M., Gidrometeoizdat 1961, 55-56).

TEXT: From a preliminary analysis of IGY data the author
concludes that the Antarctic anticyclone is a high formation, the
origin of which is connected with thermal and dynamic factors. The
prevailing circulation in the lower and middle troposphere is deter-
mined by this anticyclone. In the upper troposphere and lower stra-
tosphere in the winter predominates cyclonic circulation, while anti-
cyclonic circulation is dominant in the summer. Seasonal changes
of circulation are connected with changes in the thermal state of

Card 1/2

S/169/63/000/003/028/042
D263/D307

On the problem of seasonal ...

Antarctica (formation of a warm region at a high altitude in the summer owing to absorption of solar radiation by ozone, and radiational cooling of the stratosphere in the winter). Processes over Central Antarctica possess an analogous character.

[Abstracter's note: Complete translation]

Card 2/2

S/634/62/000/057/001/001
1053/1253

3,5000

AUTHOR: Tauber, G. M.

TITLE: Some characteristics of atmospheric circulation in the northern and southern hemispheres

SOURCE: Moscow. Gosudarstvennyy okeanograficheskiy institut. Trudy. no. 67, Moscow, 1962, 33-60

TEXT: The characteristics of the general circulation of the atmosphere of the earth's globe as well as the main differences produced by the physico-geographical conditions in the circulatory conditions in the two hemispheres, were analysed and compared. Available data concerning the zonal distribution of cyclones and anticyclones, their repeatable character and intensity, is discussed. Special attention was paid to circulation indices of atmospheric circulation in the zone included between the lines of 30 and 70 degrees of both hemispheres, based on observations made during the year 1958, when reported anomalies in the atmospheric circulation occurred compared with other years' standards. There are 8 figures and 6 tables.

English language references are:

31. Fucker G. B. Mean meridional circulation in the atmosphere. Quarty Met. Soc., vol. 86, no. 368, 1960.
32. Gibbs, W. A., Comparison of hemispheric circulations with particular reference to the Western Pacific. Quart. J. Meteorol. Soc., 79, no. 339, 1953.

Card 1/2

Some characteristics...

S/634/62/000/067/001/001
I053/I253

33. Pettersen, S., Some aspects of the general circulation of the atmosphere. Centenary Proc. Roy. Meteorol. Soc. London, 1950.
34. Rubin, M. J. and Van-Loon, H., Aspects of circulation of the Southern Hemisphere. J. Meteorol. 11, no. 1., 1954.
- ✓B

Card 2/2

SORKINA, Anna Il'inichna; TAUBER, G.M., otv. red.; MINENKO, V.M., red.;
ZARKH, I.M., tekhn. red.

[Types of atmospheric circulation and associated wind fields
over the northern part of the Pacific Ocean] Tipy atmosferykh
tsirkulyatsii i svyazannykh s nei vetrovykh polei nad severnoi
chast'iu Tikhogo okeana. Moskva, Gidrometsizdat (otd-nie),
1963. 247 p. (MIRA 16:6)
(Pacific Ocean--Winds)

GAYGEROV, Semen Semenovich; TAUBER, G.M., otv. red.; ROSHCHINA,
V.V., red.

[Aerology of the polar regions] Aerologiya poliarnykh raio-
nov. Moskva, Gidrometeoizdat, 1964. 303 p. (MIRA 17:10)

L 05342-67 EWT(1) GW
 ACC NR: AT7000234 SOURCE CODE: UR/3174/66/000/057/0060/0064 11
 AUTHOR: Tauber, G. M. (Doctor of geographical sciences) B+1
 ORG: State Oceanographic Institute (Gosudarstvennyy okeanograficheskiy institut)
 TITLE: Atmospheric circulation in Antarctica (concise review of present status of the problem)
 SOURCE: Sovetskaya antarkticheskaya ekspeditsiya, 1955-. Informatsionnyy byulleten' no. 57, 1966, 60-64
 TOPIC TAGS: atmospheric circulation, antarctic climate
 ABSTRACT: The findings of ten years of meteorological research in Antarctica are summarized. It has been found that there is a close interrelationship between synoptic processes in the high and low latitudes of the Southern Hemisphere, and a unity of atmospheric circulation in the entire hemisphere. Thus, the idea that there was an autonomous circulation in Antarctica and that Antarctica is isolated, common ten years ago, is completely refuted. In addition, it now is clear that there is air exchange between the hemispheres, although the mechanism of this circulation still has not been studied. The article defines the special problems which require continuing investigation: 1) Circulation of the atmosphere in the Southern Hemisphere and its interrelationship to circulation in the Northern Hemisphere; 2) In-

Card 1/2 0923 0769

L 05342-67

ACC NR: AT7000234

terrelationship of atmospheric processes in the high and middle latitudes of the Southern Hemisphere; 3) Principal patterns of formation of large-scale blocking processes in Antarctica; 4) Stratospheric warmings in Antarctica; 5) Interrelationship between tropospheric and stratospheric processes; 6) Anticyclogenesis over Antarctica. Mechanism of formation of the polar anticyclone, its vertical structure and characteristics of the regime; 7) Cyclonic activity over the Antarctic continent. Principal paths of cyclones, their frequency and evolution; 8) Antarctic fronts; 9) Cyclogenesis on the Antarctic front; 10) Cyclogenesis on individual parts of the polar front, principal paths and rates of movement of cyclones in dependence on the development of macroprocesses in the hemisphere and regeneration of polar front cyclones in Antarctica. [JPRS: 37,058]

SUB CODE: 04 / SUBM DATE: 08Jun65 / ORIG REF: 021

kh

Card 2/2

Measurements of Isotherms of specific wetting. A. H. Taulman, *J. Phys. Chem.* (U. S. S. R.) 1, 562-71 (1931).—A study of the effect of saponin solns. of various concns. on the wetting of paraffin by water and the rate of change of surface tension on the boundary: saponin soln., change of surface tension on the boundary; saponin soln., change of the angle of contact on the boundary air. In measuring the angle of contact of concn. of the soln. air on a paraffin wall with change of concn. of the saponin a change from an obtuse to an acute angle as a result of the adsorption of saponin on the interface is observed. Beginning with a concn. of saponin of 0.01%, the paraffin is wet by a water soln. It was assumed that the Rehbinder equation for the kinetics of adsorption was applicable. (Cf. Rehbinder, *J. Russ. Phys.-Chem. Soc.* 56, 569 (1923).) (L. Paarmann)

A-1

Surface activity and solubilization of polar molecules in relation to the nature of the phase boundary. VII. Capillary properties of aromatic amines and their salts; A. E. TAYMAN (J. Gen. Chem., Russ., 1931, 1, 1936-1937). The surface activity and adsorption of p-toluidine at the phase boundaries of H₂O and CCl₄, or hexane are in close accordance with Langmuir's law, slight deviations from which are, however, encountered at the eq. solution-air interface. The mol. counts of p-toluidine are the same at all boundaries, the length of the oriented mol. being 6.4×10^{-7} cm. and the area occupied by it an estimation 80.6×10^{-14} sq. cm. A method for the determination of the concn. of surfactive substances in solution is described which depends on the capillo-manometric measurements of surface tension. p-Toluidine is present partly as monomer, mostly as dimer in aqueous solutions. The above mentioned work is hydrocarbon solution. The above method is applied to determine the solubility of p-toluidine and o-, m-, and p-cresols in H₂O. Antosov's law (cf. A. 1907, II 606) is not applicable to the above systems.

E. TRAPPENKOWITZ

[illegible]

1ST AND 2ND COPIES										3RD AND 4TH COPIES									
PROCESSES AND PROPERTIES INDEX																			
<p><i>Sa</i></p> <p>5444. Surface Activity of Non-Polar Molecules of Hydrocarbons. Part I. A. Taubmann. <i>Acta Physicochimica</i>, 5, 3, pp. 355-380, 1936. <i>In English.</i>—The surface activity of a number of cyclic and fatty hydrocarbons and of some of their Cl derivatives is investigated by obtaining the surface tension isotherms of their solutions at liquid-liquid (paraffin oil-water) and liquid-gas (nitrobenzene-air) interfaces. It is shown that in the case of sufficient differences in polarities at interfaces for which the rule of equalization of polarities is satisfied, the non-polar molecules of hydrocarbons are surface-active and yield typical adsorption isotherms which obey the Langmuir-Szyszkowski equation. For the various homologous series of hydrocarbons investigated, the increase in surface activity follows the Traube rule, though with different coefficients. The molecular constants of the adsorption layer are calculated, from which it is ascertained that, in an adsorption layer, non-polar molecules assume horizontal positions which they retain at all the stages of condensation until the layer is saturated. It is shown that the usual equation of state of two-dimensional layers is applicable to the adsorption layers of hydrocarbons. H. H. Ho.</p>																			
A 53 d																			
ASD-5, A METALLURGICAL LITERATURE CLASSIFICATION SYMBOLS FOR ONLY ONE DESIGNATION SYMBOLS FOR ONLY ONE DESIGNATION																			

COMMON ELEMENTS		PROCEDURES AND PROPERTIES INDEX		COMMON ELEMENTS	
<p><i>Ca</i></p>		<p>Horizontal orientation and solvation of molecules in adsorption layers. A. B. Tushman. <i>Compt. rend. acad. sci. U. R. S. S.</i> 29, 22-6(1960)(in English).—An investigation was made of the surface activity of the interface between air and various nitrobenzene solns., contg. hydrocarbons and polar compds. The measurements made consisted of isotherms showing the decrease in surface tension of the nitrobenzene solns. with increasing concn. of the hydrocarbons and polar compds., such as alcs. and fatty acids. Some effects similar to those known for aq. solns. were noted, such as the increase in surface activity with increase in the mol. wt. of the hydrocarbon. The adsorption studied was found to differ from that for the aq. case in most respects. The isotherms of surface tension vs. concn. showed no inflections either for the hydrocarbons or for the polar compds. This form of the isotherms was explained on the assumption that the surface layers of the hydrocarbons and polar compds. were oriented horizontally, making it possible for the hydrocarbon chains to be solvated by the surrounding medium. Proof of such horizontal orientation was presented in a study of the dimensions of the adsorbed moles, detd. indirectly from the Gibbs' adsorption equation. The coeff. of Traube's rule was found to change on the basis of this assumption.</p>		<p>2</p>	
<p>ALB-514 METALLURGICAL LITERATURE CLASSIFICATION</p>		<p>6-577-275-2272</p>			
<p>12000 1175513R</p>		<p>12000 1175513R</p>			
<p>12000 1175513R</p>		<p>12000 1175513R</p>			

1ST AND 2ND CROSS										3RD AND 4TH CROSS									
PROCESSES AND PROPERTIES INDEX																			
<p>Structure of adsorption layers and the form of surface-tension isotherms. A. B. Taubman. <i>Comp. rend. acad. sci. U. R. S. S.</i> 26, 100-7 (1960) (in English); cf. preceding abstr. — The theory of horizontal orientation at the surface layer of sym. mole. adsorbed from their nitrobenzene solns. was extended to the case of aq. solns. Surface-tension measurements were made in aq. solns. of face-tension compounds for which horizontal orientation in the adsorption layers could be assumed. The compounds were of two general groups: (1) mole. contg. several symmetrically arranged polar groups, as the dibasic acids and their esters, and diatomic alcohols; (2) heterocyclic compounds such as the pyridine derivatives. The mole. of the first group were found to be oriented horizontally on the basis of calcs. of mol. dimensions. The lower members of the group showed an inflection on the isotherms of surface tension vs. concn., but the higher members had a definite inflection. The isotherms for pyridine and its homologs showed no inflections and the mol. consists of the layers corresponded to a horizontal arrangement of the adsorbed mole. Other heterocyclic compounds, such as piperidine and quinoline, showed vertical orientation.</p> <p style="text-align: right;">J. Kaye</p>																			
<p>ASS-114 METALLURGICAL LITERATURE CLASSIFICATION</p>																			
<p>RECORD DIVISION</p>										<p>RECORD DIVISION</p>									
<p>RECORD DIVISION</p>										<p>RECORD DIVISION</p>									

1ST AND 2ND ORDERS PROCESSING AND SUBSCRIPTIONS UNIT												3RD AND 4TH ORDERS											
<div style="position: absolute; top: 10px; left: 10px; font-size: 2em; font-weight: bold;">ca</div> <div style="position: absolute; top: 10px; right: 10px; font-size: 2em; font-weight: bold;">2</div> <div style="position: absolute; top: 50px; left: 50px; width: 80%; height: 100px;"> <p style="text-align: center; font-weight: bold;">Molecular orientation in adsorption layers and Traube's rule. A. B. Taubman. <i>Compt. rend. acad. sci. U. R. S. S. 20, 210-212 (1940) (in English).</i>—The theory of horizontal orientation of adsorbed nuclei is extended to compounds with quite varied composition. The theory is applied, in connection with the value of the coeff. β in Traube's rule, to gaseous layers at the interface. The work of forming a horizontally oriented layer is expressed in terms of β for a polar compd. with a hydrocarbon group. It is concluded that the type of mol. orientation in the adsorption layers, with regard to the structure of the surface-active compounds, differs not only in kind, but also in gaseous layers. For sym. mols., oriented horizontally, the arrangement of hydrocarbon chains, submerged in the surface layer of the solvent, is retained throughout the entire concn. interval. However, the chains of asym. mols. which form vertically oriented condensed layers lie on the interface for the case of gaseous layers and not inside the phase. J. K.</p> </div>												<div style="position: absolute; top: 50px; left: 50px; width: 80%; height: 100px;"> <p style="text-align: center; font-weight: bold;">ASB-SLA DETAILING LITERATURE CLASSIFICATION</p> </div>											
1ST AND 2ND ORDERS PROCESSING AND SUBSCRIPTIONS UNIT												3RD AND 4TH ORDERS											

1ST AND 2ND COORDS		PROCESS AND PROPERTIES INDEX		3RD AND 4TH COORDS	
<p>ca</p>		<p>2</p>			
<p>Surface activity and adsorption in nonaqueous solutions. A. B. Taubman. <i>Compt. rend. acad. sci. U. R. S. S.</i> 29, 213-15(1940)(in English).—The study of the structure of adsorption layers in nonaq. solvents was extended to liquids differing widely in dielec. consts. and dipole moments, such as aniline, formamide, ethylene glycol and α-bromonaphthalene. The surface-active compds. studied were those that form surface layers with various orientations of the adsorbed moles, such as hydrocarbons, esters of dibasic acids, alcs. and pyridine with its derivs. The results of the measurements confirmed fully those found previously for solns. in H_2O and nitrobenzene (C. A. 35, 2708^{1a}). The variations in the results are interpreted on the basis of the polarity of the various solvents. The dispersions of the adsorbed moles. were found to be the same for all solvents and to coincide with those detd. in aq. solns. The relation between the surface activity of these compds. and the nature of the solvent was found to be quite complex, but the changes observed are understandable in terms of the principle of independent action. The surface activity of the compds. increased with increase of the surface tension of the solvent. A method for estg. the polarity of a medium on the basis of the coeff. of Traube's rule, β, is proposed and illustrated. Joseph Kaye</p>					
<p>ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>					
<p>25000 27000000</p>		<p>25000 27000000</p>		<p>25000 27000000</p>	
<p>100000 100000</p>		<p>100000 100000</p>		<p>100000 100000</p>	
<p>100000 100000</p>		<p>100000 100000</p>		<p>100000 100000</p>	

Molecular orientation in adsorption layers and Traube's rule. A. B. Taubman (*Compt. rend. Acad. Sci. U.R.S.S.*, 1941, 89, 210-212; *Zh. A.*, 1941, 1, 168). During adsorption from the liquid phase at liquid-gas interfaces, work is considered to be done by the cohesive forces of the solvent in forcing the adsorbed mols. into a flat position in the surface layer and, at higher surface concns., also in forcing a hydrocarbon group out of the surface layer while the polar group remains inside that layer. The difference in the work of adsorption (ΔW) produced by increasing the length of the C chain in the solute by CH_2 is related to the coeff. β in Traube's rule by $\beta = \Delta W / RT$. The vals. of both β and ΔW for horizontally oriented layers are therefore $<$ for vertically oriented layers. J. W. S.

L. W. S.

2

CA

Structure of surface layers of aqueous solutions. A. H. Taubman. *Doklady Akad. Nauk S.S.S.R.* 71, 343 (1967). Crit. analysis and recalc. of the available literature data with the aid of the rigorous Gibbs adsorption equation resolved the existing contradictions and led to the following set of values of the min. surface area S (in sq. A.) occupied by a mol. in the surface film: aliphatic acids (n-C₁ to C₁₈) 31.0-30.2; isocaproic acid 30.6; aliphatic alcs. (n-C₁ to C₁₈) 28.9-27.4; iso-AmOH 29.0; BuNH₂ 29.0; AcOEt 30.6; AcOPr 31.6; PhCH₂OH 28.1; PhOH 28.6; p-MeC₆H₄OH 29.6; PhNH₂ 27.6; in condensed monolayers, aliphatic acids 20.6; aliphatic alcs. 21.6; aliphatic amines 20.6; esters 22.3; p-derivs. of C₆H₅ 24.0. These data are summarized by the set: aliphatic acids 20.6, alcs. 26.1, amines 28.9; aromatic acids 20.8, alcs. 26.4, amines 27.9. The values of S in different homologous series are thus very close, and markedly higher than either the effective cross sections of the mol. or the mol. packing d. in condensed monolayers of the insol. higher homologs. Strikingly, S values of esters are practically identical with the S of the corresponding acids, despite the considerable increase of the size of the polar groups. The leveling factor which annuls the effect of the polar group is evidently hydration, in other words, the solvent takes part in the structure of the adsorbed layer. This does not occur in a nonsol. soln.; hence, for BuOH and C₆H₅OH in CH₂Cl₂ and in PhNH₂, S = 22-23 sq. A., as against 28 in H₂O. Similarly, for the lower fatty acids adsorbed from vapor on Hg, S = 22 instead of 30.6. The hydrating H₂O is evidently hydrogen-bonded with the polar group of the org. compd.; this results in a uniform S of 28-31 sq. A., irrespective of the nature of the polar group. N. Thon

C. A.

2

Adsorption from aqueous solutions of surface-active substances. A. B. Tsubman (Phys. Chem. Inst., Acad. Sci. U.S.S.R., Moscow). *Doklady Akad. Nauk S.S.S.R.* 74, 521-4 (1960).—The adsorption of p -MeC₆H₄NH₂ (I) at the interface aq. soln./vapor, detd. by surface-tension measurements, is in no range increased by C₆H₅N (II) in the same soln.; increasing amts. of II only decrease the adsorption of I, without altering its S-shaped curve. The only observed effect in the binary I-II soln. is displacement. In contrast thereto, in the system I-PhNH₂ (III), the adsorption curve of I at low concns. lies below and intersects the curves of adsorption of I in the presence of III in the same soln. The concn. of I corresponding to the point of intersection is higher the lower the amt. of III. The S-shaped bend of the adsorption curves of I is gradually attenuated as the amt. of III increases and disappears altogether at sufficiently high III. In mixed aq. soln. of stearic acid and CO(NH₂)₂, adsorption of one component (at the interface aq. soln./hydrocarbon) is always enhanced by the presence of the other component, i.e. the adsorption curves of the mixed solns. lie above the curve of the pure component, without intersection. Only in this case can the interaction be ascribed to polar groups. In the case of the system I-III the effect is not due to an interaction between the 2 components, but to diln. of mols. of one component by the mols. of the other in the adsorbed layer.

N. Thon

2

Molecular interactions in adsorption layers. A. B. Taubman (Acad. Sci. U.S.S.R., Moscow). *Doklady Akad. Nauk S.S.S.R.* 74, 710-61 (1950); cf. C.A. 44, 8153r. — Isotherms of the surface tension σ at the interface between a soln. of a water-insol. surface-active substance (cetyl alc., lauric acid, stearic acid) in $\text{C}_{11}\text{H}_{24}$ and H_2O , plotted against the concn. x of the surface-active substance, are different from the usual $\sigma(x)$ curves for the interface of an aq. soln. and vapor; in particular, they fail to show the initial S-shaped bend which is characteristic of the water-sol. members of all homologous series from about C_{12} upwards. That different shape of the σ isotherms is evidently due to an interaction between the nonpolar ends of the solute mole. and the hydrocarbon solvent, which results in a weakening of the mutual attraction between the solute mole. In terms of the Schofield and Riesen equation of state, $\Delta\sigma(S - S_{\text{min}}) = RT\chi$, the change of the shape of the σ isotherm is linked with the value of χ , expressing the lateral attraction force between the solute mole. in the surface layer; χ falls with increasing chain length, from 0.95 for

AcOH to 0.21 for lauric acid. Accordingly, for the interface lauric acid in aq. soln./vapor, the $\Delta\sigma(x)$ curve has the typical S shape. In contrast thereto, the same curve for stearic acid in $\text{C}_{11}\text{H}_{24}/\text{H}_2\text{O}$ corresponds to $\chi = 0.95$, i.e. is practically the same as for the lowest members of the homologous series. Consequently, mole. of the water-insol. higher homologs adsorbed at the interface org. soln./ H_2O , are in the gaseous state. The min. surface area S_{min} occupied by an oriented stearic acid mole. at the interface org. soln./ H_2O , 30.7 sq. Å, is the same as for the water-sol. lower and medium fatty acids, and different from the surface area, 20.5 sq. Å, of a mole. in a condensed monolayer. This expansion of the surface layer, which brings it close to the gaseous state, is the result of the solvation of the stearic acid. The product of the surface-area expansion, $\Delta S \sim 10$ sq. Å./mole., by the surface pressure of the natl. surface layer, ~ 25 dyne, gives for the free energy of formation of the "surface soln." ~ 300 cal./mole. The closeness of the $\sigma(x)$ isotherms of lauric and of stearic acid indicates that, with identical polar groups, the length of the chain has no significant effect on the work of adsorption.

N. Thon

YAKHNIN, Ye.D.; TAUEMAN, A.B.

Structure formation in disperse systems. Dokl. AN SSSR 155
no.1:179-182 Mr '64. (MIRA 17:4)

1. Institut fizicheskoy khimii AN SSSR. Predstavleno akademikom
F.A.Rebinderom.

TAUBMAN, A.B.

LAPATUKHIN, V.S.; TAUBMAN, A.B.. doktor khimicheskikh nauk, redaktor.

[Physical and chemical principles of offset form processes. Making materials for blanks] Fiziko-khimicheskie osnovy ofsetnykh formnykh protsessov; obrazovanie probel'nykh elementov. Pod red. A.B.Taubmana. Moskva, Iskusstvo, 1952. 171 p. (MLRA 7:6)
(Offset printing)

TANBMAN, A A

The structure of soap micelles is determined by the

equation. The mean values of S are for aliphatic acids 30.5, aliphatic and aromatic acids 29.5, aliphatic amines 30.0, aromatic acids 30.0, and aromatic amines 30.0. They are greater than the areas to minimize the head group.

does not affect the packing of soap micelles. In the absence of hydration, e.g., on H₂, the S values are identical. The difference in S of fatty acids and their Ca and Ba soaps is due to the absence of hydration of the latter. 73 references. J. J. Bikerman

SCHWARTZ, Anthony M.; FERRY, James W.; TAUBMAN, A.B., doktor khimicheskikh nauk, redaktor.

[Surface active agents; their chemistry and technology] Poverkhnostnoaktivnye veshchestva; ikh khimiia i tekhnicheskie primeneniia. Moskva, Izd-vo inostrannoi lit-ry, 1953. 544 p. (MLRA 7:2)
(Surface active agents)

TAUBMAN, A., doktor khimicheskikh nauk; KORETSKIY, A., inzhener.

Emulsion method of cleaning petroleum product residues from petroleum tankers.
Mor. i rech. flot 13 no. 1:5-7 My '53.

(MIRA 6:10)

(Tank vessels)

TAUBMAN, A.B.

USSR/Miscellaneous

Card 1/1 : Pub. 124 - 11/24

Authors : Taubman, A. B., Dr. of Chem. Sc.; and Koretskiy, A. F.

Title : New method of scavenging petroleum tankers

Periodical : Vest. AN SSSR 9, 62-64, Sep 1954

Abstract : A new emulsion method of scavenging sea-going and river tankers, developed by specialists of the Sea and River Fleet of the USSR, is described. The basic operation consists in liquifying the thick viscous petroleum residue on bottom of the tanker and removal by a standard pump.

Institution : ...

Submitted : ...

TAUBMAN, A.B., doktor khimicheskikh nauk; NIKITINA, S.A.

Physical and chemical investigation of wetting agents used in
dust catching. Bor'ba s sil. 2:61-70 '55. (MIRA 9:5)

1. Institut fizicheskoy khimii Akademii nauk SSSR.
(DUST--PREVENTION) (WETTING AGENTS)

TAUBMAN, A.B.

"Introduction to the theory of flotation." V.I.Klassen, V.A.Mokrousov. Reviewed by A.B.Taubman. Koll.shur.17 no.1:78-79 Ja-F '55.
(Flotation)(Klassen, V.I.)(Mokrousov, V.A.) (MIRA 8:3)

SOV/124-58-11-13560

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 226 (USSR)

AUTHORS: Taubman, A. B., Venstrem, Ye. K.

TITLE: The Laws Governing the Effect of Surface-active Substances on the Creep of Metallic Single Crystals (Zakonomernosti vliyaniya poverkhnostno-aktivnykh veshchestv na polzuchest' metallicheskich monokristallov)

PERIODICAL: V sb.: Tr. 3-y Vses. konferentsii po kolloid. khimii. 1953 g. Moscow, AN SSSR, 1956, pp 52-64

ABSTRACT: A clarification of the general laws governing the effect of surface-active substances on the deformation of metals in terms of the molecular properties and the chemical composition of the substances. Constant-load tests were performed on 0.5-1.0 mm diam single-crystal wire specimens made of tin and lead. The external medium consisted of solvents, such as octane, benzol, and water, and solutions therein of surface-active substances. In this investigation no application was made of measures for the complete removal of the oxide films, since the effect of the facilitation of deformations becomes apparent in the presence, as well as in the absence, of

Card 1/2

SOV/124-58-11-13560

The Laws Governing the Effect of Surface-active Substances on the Creep (cont.)

such films. It was shown that the effect of the facilitation of deformations in metals attributable to surface-active substances essentially obeys the standard laws of adsorption which characterize the adsorption of such substances on liquid interfaces.

A. I. Yatsyuk

Card 2/2

THOMSEN, A. E.

The effect of physicochemical factors in the interaction of dust particles with drops of solutions of surfactants. A. E. Thomsen and S. A. Shadrin, *Doklady Akad. Nauk SSSR*, 110, 609-2 (1960). The dust-collecting ability of water and surfactant solns. was evaluated in a special app. by laser nephelometry by the turbidity of dust suspensions relative to air, spraying the condensed dust particles with a stream of carbon tetrachloride dust-free space. Quartz dust, up to 10 μ , and coal and iron dust, up to 6 μ in size, were treated with atomized water droplets contg. polyethylene glycols of alkylated phenols, Aerosol OT, tech. grade of sulfonol, isonitrol, 0.01% CaCl_2 soln., and alkyl-arylsulfonates. The results appear to indicate that the imperfect contact of the dust particles with water is not due to the air flowing around the water droplets but to the difficulties of wetting the solid surfaces and to the dynamic conditions during the brief contacts of dust with the droplets. The adsorption layer of the wetting agents has a hydrophilizing effect upon the solid particles and facilitates their contact with the liquid; this assures a better dust gain. W. M. Sternberg.